REMARKS

This communication is a full and timely response to the aforementioned final Office Action dated April 30, 2008 and the Advisory Action dated October 9, 2008. By this communication, claims 1, 12 and 14 are amended. Claims 2-6, 8-11, 13 and 15-18 are not amended and remain in the application. Thus, claims 1-6 and 8-18 are pending in the application. Claims 1, 5, 9 and 12-15 are independent.

Reexamination and reconsideration of the application are requested in view of the foregoing amendments and the following remarks.

I. Allowed Claims

Applicant thanks the Examiner for kindly allowing claims 5, 9-11, 13 and 15. No amendments have been made to the allowed claims.

II. Rejections under 35 U.S.C. § 102(e)

Claims 1-4, 6, 8, 12, 14 and 16-18 were rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Miyawaki (U.S. 6,032,001).

Without acquiescing to this rejection, independent claims 1, 12 and 14 have each been amended to emphasize distinctions between the claimed invention and the applied references. Applicant respectfully submits that the claimed invention is patentable over Miyawaki for at least the following reasons.

Claim 1 recites an equipment management apparatus for transmitting management information collected from a plurality of equipment to a centralized management apparatus. Claim 1 recites that the equipment management apparatus comprises a detector for detecting a trouble which has occurred in a first image forming apparatus for forming an image on a sheet.

Claim 1 also recites that the equipment management apparatus comprises a transmission controller for, when the trouble is detected by the detector, transmitting management information about a second image forming apparatus for forming an image on a sheet, in which the trouble has not occurred and which is independent from the first image forming apparatus, together with the trouble information about the first image forming apparatus to the centralized management apparatus.

Claim 12 recites an equipment management system comprising the equipment management apparatus recited in claim 1. Claim 14 recites an equipment management method comprising steps corresponding to the operations of the equipment management apparatus recited in claims 1 and 12.

Applicant respectfully submits that Miyawaki does not disclose or suggest all the recited features of independent claims 1, 12 and 14 for the following reasons.

In particular, Applicant respectfully submits that Miyawaki does not disclose or suggest at least the following two features of claims 1, 12 and 14:

(1) the transmission controller transmits the management information about the second image forming apparatus, in which the trouble has not occurred, together with the trouble information about the first image forming apparatus to the centralized management apparatus; and

(2) the transmission controller transmits the management information about the second image forming apparatus, in which the trouble has not occurred, together with the trouble information about the first image forming apparatus to the centralized management apparatus when the trouble which has occurred in the first image forming apparatus is detected by the detector.

Miyawaki discloses a remote diagnosis system that includes an image forming apparatus group 100 consisting of a plurality of image forming apparatus 100-1 to 100-5, a data communication apparatus 200 and a central controlling device 400 for communicating with the data communication apparatus 200 via a communication line 300 (see Figure 1). Each of the image forming apparatus 100-1 to 100-5 of the image forming apparatus group 100 and the data communication apparatus 200 are connected using a multi-drop connection configuration as shown in Figure 1 (see Column 3, lines 56-59). In particular, as shown in Figure 1, Miyawaki discloses that the plurality of image forming apparatus 100-1 to 100-5 are each serially connected to each other, and that the image forming apparatus 100-1 is connected to the data communication apparatus 200.

Miyawaki discloses that each of the plurality of image forming apparatus 100-1 to 100-5 is assigned a predetermined different device code (see Column 4, lines 23-24, and Column 5, lines 18-20). The central control apparatus 400 controls the remote diagnosis system to transfer request and alarm data from the image forming

apparatus group 100 to the central control apparatus 400 through the data communication apparatus 200 by performing a polling operation (see Column 4, lines 39-43). During the polling operation, the central control apparatus 400 controls the data communication apparatus 200 to sequentially communicate with each image forming apparatus 100-1 to 100-5 by using the unique device codes assigned to each image forming apparatus 100-1 to 100-5, respectively. The polling operation from the data communication apparatus 200, as illustrated in Figure 4, is executed by designating one of the image forming apparatus 100-1 to 100-5 and checking whether each image forming apparatus 100-1 to 100-5 has communications data, such as an alarm, to send to the central control apparatus 400. Each image forming apparatus 100-1 to 100-5 compares its own allocated device code with the device code included in a polling communication from the data communication apparatus 200. One of the image forming apparatus 100-1 to 100-5 is recognized as being designated for the polling operation, when its device code matches the device code sent from the data communication apparatus 200. Then, the designated image forming apparatus correspondingly starts outputting communication data to the central control apparatus 400 (see Column 5, line 62 to Column 6, line 19; Column 6, line 42 to Column 7, line 3; and Figure 4). Accordingly, during the polling operation, the data communication apparatus 200 communicates with only one of the image forming apparatus 100-1 to 100-5 at a time, because the image forming apparatus 100-1 to 100-5 do not respond to the data communication apparatus 200 unless the data communication apparatus 200 transmits the unique device code of the respective image forming apparatus 100-1 to 100-5.

Miyawaki discloses that the polling operation is continuously executed to each of the image forming apparatus 100-1 to 100-5 in a predetermined sequence until a selecting operation, which has priority over the polling operation, is started (see Column 7, lines 22-25). The selecting operation of Miyawaki is similar to the polling operation in that the data communication apparatus 200 communicates with only one image forming apparatus at a time by using the respectively unique device codes of the image forming apparatus 100-1 to 100-5. However, in the selecting operation, the central control apparatus 400 controls the data communication apparatus 200 to communicate with a predetermined image forming apparatus (i.e., a selected one of

the image forming apparatus 100-1 to 100-5) at one time instead of sequentially polling each image forming apparatus 100-1 to 100-5 (see Column 5, lines 14-25).

In an attempt to arrive at the subject matter of claims 1, 12 and 14, the Office asserted that Miyawaki discloses the features of the transmission controller of claims 1 and 12 and the corresponding step of claim 14 in Column 14, lines 15-57 and in Figures 1, 14 and 15. The Office asserted that a sensor in each of the image forming apparatus 100-1 to 100-5 of Miyawaki corresponds to the detector of claims 1 and 14 and step 1 of claim 12, and that the data communication apparatus 200 of Miyawaki corresponds to the transmission controller of claims 1 and 14 and step 2 of claim 12. These assertions are not supportable for the following reasons.

The portions of Miyawaki referenced by the Examiner merely disclose that troubles can be characterized as urgent or non-urgent and that such a characterization can be displayed on a display 142 of the corresponding image forming apparatus 100-1 to 100-5 in which the trouble occurred. In particular, Miyawaki discloses that if a controller of one of the image forming apparatus 100-1 to 100-5 has detected an urgent trouble, the urgent trouble can be reported to the central control apparatus 400 via the data communication apparatus 200, and the display 142 of the image forming apparatus 100-1 to 100-5 in which the trouble occurred can display a notification that the urgent trouble has been reported (see Column 14, lines 15-32).

However, the portions of Miyawaki referenced by the Examiner, nor any other portions of Miyawaki, do not disclose or suggest that the data communication apparatus 200 transmits a trouble notification from one of the image forming apparatus 100-1 to 100-5 (first image forming apparatus), together with management information of another one of the image forming apparatus (second image forming apparatus), in which the trouble has not occurred.

Miyawaki does not disclose or suggest that when a trouble sensor in one of the image forming apparatus 100-1 to 100-5 (e.g., image forming apparatus 100-1) has detected a trouble, the data communication apparatus 200 transmits management information of another one of the image forming apparatus (e.g., image forming apparatus 100-2), in which the trouble has not occurred, to the central control apparatus 400.

On the contrary, Miyawaki discloses that when one image forming apparatus (e.g., image forming apparatus 100-1) detects a trouble, that image forming apparatus 100-1 transmits a trouble notification to the data communication apparatus 200 (see Column 14, lines 30-32 and Column 15, lines 15-26). However, the selecting and polling operations of Miyawaki dictate when other forming apparatus (e.g., 100-2 to 100-5) communicate any trouble detected therein to the central control apparatus 400 via the data communication apparatus 200 (see Column 6, lines 42-60). In particular, as described in Column 5, line 62 to Column 6, line 19, Miyawaki discloses that the transmission of urgent troubles from the data communication apparatus 200 to the central control apparatus 400 are prioritized over non-urgent data communications, which are transmitted at designated time intervals.

Accordingly, Miyawaki does not disclose or suggest that the data communication apparatus 200 transmits management information about a second image forming apparatus, in which the trouble has not occurred, together with trouble information about the first image forming apparatus to the centralized management apparatus, as recited in claims 1, 12 and 14.

Consequently, Miyawaki does not disclose or suggest (1) the transmission controller transmits the management information about the second image forming apparatus, in which the trouble has not occurred, together with the trouble information about the first image forming apparatus to the centralized management apparatus, as recited in claims 1, 12 and 14.

In addition, Applicant respectfully submits that Miyawaki also does not disclose or suggest the above-described feature (2) of claims 1, 12 and 14. In the Response to Final Rejection filed on September 24, 2008, Applicant traversed the Office's assertion that Miyawaki discloses feature (2) of claims 1, 12 and 14. However, the Office did not address Applicant's arguments in the Advisory Action dated October 9, 2008. On the contrary, the Office made reference to a portion of Miyawaki which discloses an opposite configuration to that of feature (2).

In particular, in lines 14-17 of the Continuation Sheet attached to the Advisory Action, the Office identified the disclosure of Column 12, lines 23-28 of Miyawaki. This referenced portion of Miyawaki provides that "the data sent from each of the

image forming apparatus is stored in a memory of the data communication apparatus 200 and may be sent to the central control apparatus 400 once during a predetermined time in a day *without regard to a time when an event to be informed thereto occurs*, in a normal communication mode (b-2)." (emphasis added)

The above-quoted portion of Miyawaki discloses the opposite configuration to that which is recited in claims 1, 12 and 14. In particular, claims 1, 12 and 14 recite that the transmission controller transmits the management information about the second image forming apparatus, in which the trouble has not occurred, together with the trouble information about the first image forming apparatus to the centralized management apparatus when the trouble which has occurred in the first image forming apparatus is detected by the detector.

On the contrary, Miyawaki discloses that the data transmission apparatus 200 transmits the data sent from each image forming apparatus 100-1 to 100-5 once during a predetermined time in a day without regard to a time when an event to be informed thereto occurs. Accordingly, Miyawaki discloses that data received from each of the image forming apparatus 100-1 to 100-5 is first stored in a memory of the data communication apparatus 200, and then the data communication apparatus 200 transmits it the stored data at some predetermined time. This predetermined time has no relation to when a trouble is detected in one of the image forming apparatus 100-1 to 100-5. On the contrary, the transmission time is some predetermined time not having any relation to when a trouble is detected in one of the image forming apparatus (e.g., 100-1).

Furthermore, Miyawaki does not disclose that the data communication apparatus 200 transmits information about another image forming apparatus (e.g., 100-2) in which the trouble has not occurred. Column 12, lines 17-22 of Miyawaki disclose that there are two forms of communication: (1) a quick-communication mode (b-1); and (2) the above-described normal communication mode (b-2) in which the data collected from each image forming apparatus 100-1 to 100-5 is first stored in the data communication apparatus 200 and then all transmitted to the central control apparatus 400 at a predetermined time during the day. The quick-communication mode (b-1) of Miyawaki includes transmitting "the data related to the causes of the trouble" from the data communication apparatus 200 to the central

control apparatus 400 shortly after an event (i.e., trouble) has occurred in a particular image forming apparatus. The quick-communication mode, however, does not involve transmitting information about the trouble concerning the image forming apparatus (e.g., 100-1) in which the trouble has occurred, together with management information about a second image forming apparatus in which the trouble has not occurred. On the contrary, the quick-communication mode of Miyawaki consists of transmitting only the trouble information about a particular image forming apparatus (e.g., 100-1) in which the trouble has occurred.

Consequently, Miyawaki does not disclose or suggest that when a trouble is detected in one image forming apparatus, the data communication apparatus 200 transmits management information about another image forming apparatus, in which the trouble has not occurred, together with the trouble (urgent or non-urgent) information to the central control apparatus 400. On the contrary, Miyawaki discloses that the transmission of management information from one of the image forming apparatus is performed when the trouble occurs in that image forming apparatus, but management information about another image forming apparatus, in which the trouble has not occurred, is performed after that other image forming apparatus has been polled and/or selected individually and sequentially.

Accordingly, for at least the foregoing reasons, Applicant respectfully submits that Miyawaki does not disclose or suggest that when a trouble which has occurred in a first image forming apparatus is detected, management information about a second image forming apparatus, which is independent from the first transmitting apparatus, is transmitted together with the trouble information about the first image forming apparatus, as recited in claims 1, 12 and 14.

Therefore, Miyawaki fails to disclose or suggest all the recited features of at least claims 1, 12 and 14.

Furthermore, in view of the clear distinctions discussed above, one skilled in the art would not have reason or been motivated to modify Miyawaki in such a manner as to result in, or otherwise render obvious, the subject matter of claims 1, 12 and 14.

Dependent claims 2-4, 6 and 8 recite further distinguishing features over Miyawaki.

For instance, Miyawaki does not disclose or suggest that when one of the image forming apparatus 100-1 to 100-5 reports its urgent or non-urgent trouble to the central control apparatus 400 via the data management apparatus 200, the data management apparatus 200 obtains the management information of another one of the image forming apparatus 100-1 to 100-5. On the contrary, the reporting of urgent and non-urgent troubles by one of the image forming apparatus is performed independently from the data management apparatus 200 obtaining or collecting management information from another one of the image forming apparatus. Accordingly, Miyawaki does not disclose or suggest the features of claim 2.

In addition, dependent claims 16-18 recite further distinguishing features over Miyawaki. Claims 16-18 each recite that the equipment management apparatus is independently connected to the first image forming apparatus and the second image forming apparatus. In contrast to claims 16-18, Miyawaki discloses that the plurality of image forming apparatus 100-1 to 100-5 are each serially connected to each other, and that the image forming apparatus 100-1 is connected to the data communication apparatus 200 (see Column 3, lines 56-59, and Figure 1). Therefore, Miyawaki discloses an opposite connection arrangement to that recited in claims 16-18, because the data communication apparatus 200 is serially connected to each one of the image forming apparatus 100-1 to 100-5.

Accordingly, for at least the foregoing reasons, Applicant respectfully submits that Miyawaki does not disclose or suggest all the recited features of independent claims 1, 12 and 14, as well as claims 2-4, 6, 8 and 16-18 which depend therefrom.

Therefore, Applicant respectfully submits that claims 1, 12 and 14, as well as claims 2-4, 6, 8 and 16-18 which depend therefrom, are patentable over Miyawaki.

III. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. Accordingly, Applicant requests a favorable examination and consideration of the instant application.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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